Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LEE W. TUTT
and SHARON W. WEBER

Appeal No. 1996-1887
Application 08/295,315

HEARD: September 12, 2000

Before KIMLIN, WARREN and DELMENDO, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 7 through 11 as amended subsequent to the final rejection, which are all of the claims remaining in the application.[1]

We have carefully considered the record before us, and based thereon, find that we cannot sustain the grounds of rejection of appealed claims 7 through 11 under 35 U.S.C. § 103 over DeBoer '572 in view of DeBoer '582 and Vanier '860 and of appealed claims 7 and 11 over DeBoer '572 in view of DeBoer '582 and Vanier '860, as applied in the first ground of rejection,

[1] See specification, page 19, and the amendment of July 14, 1995 (Paper No. 7).

further in view of Vanier et al. '144 (answer, pages 3-6).[2]

It is well settled that in order to establish a *prima facie* case of obviousness, "[b]oth the suggestion and the expectation of success must be founded in the prior art, not in applicant's disclosure." *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). Thus, a *prima facie* case of obviousness is established by showing that some objective teaching or suggestion in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention as a whole, including each and every limitation of the claims, without recourse to the teachings in appellants' disclosure. *See generally, In re Oetiker*, 977 F.2d 1443, 1447-48, 24 USPQ2d 1443, 1446-47 (Fed. Cir. 1992) (Nies, J., concurring); *In re Warner*, 379 F.2d 1011, 1014-17, 154 USPQ 173, 176-78 (CCPA 1967).

We agree with appellants that the examiner has failed to carry his burden of making out a *prima facie* case of obviousness with respect to the claimed invention. We have interpreted appealed claim 7 in light of appellants' specification as it would be interpreted by one of ordinary skill in this art to encompass a process of forming an ablation image comprising at least heating by means of a laser, a dye-ablative recording element comprising at least a support, an image dye layer, and a polymeric overcoat comprising at least a polyurethane, cellulose nitrate, cellulose acetate propionate, gelatin or a polyacrylate containing polytetrafluoroethylene (PTFE) beads, but *not* a separate receiving element. *See In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). The sole disclosure in the record adduced by the examiner that pertains to the laser heating of an element that contains a support, a dye layer, and overcoat , but no receiving element, is the section of DeBoer '572 Example 3 involving a "variation to *demonstrate* positive imaging" formed by the laser heating of an assembly that includes both a dye-donor element *and* a dye-receiver element, wherein the "evaluation was done . . . [without a] dye-receiver" such that an "air stream was blown over the donor surface" to remove dye "sublimed away by the laser" (col. 17, lines 40-67; emphasis supplied).

The overcoat used in the dye-donor element of this section of DeBoer '572 was formed

[2] The references relied on by the examiner are listed at page 2 of the answer.

"from an aqueous solution" that contained polystyrene beads as described in DeBoer '582 (DeBoer '572, col. 17, lines 49-51; col. 16, lines 16-19; and col. 4, lines 42-47). In DeBoer '582 Example 2, the dye-donor element has an "overcoat of a water suspension of polystyrene beads . . . in a binder of white glue (a water based emulsion polymer of vinyl acetate . . . and . . . [a] surfactant . . . " (col. 7, lines 16-20; compare col. 6, lines 3-6). DeBoer '582 teaches that the dye-donor element overcoat should contain sufficient spacer beads to prevent contact between the dye-donor element and the dye-receiving element "during the laser-induced thermal transfer;" that the spacer beads should not be in the dye layer; and that the polymeric binder containing the spacer beads should aid in physical handling and be dye-permeable (col. 2, lines 7-58).

Contrary to the examiner's position (answer, e.g., pages 7-9), we find no disclosure in the combined teachings of the DeBoer references which would have reasonably suggested to one of ordinary skill in this art to modify the sole demonstration dye-donor element disclosed in DeBoer '572 Example 3 by replacing the overcoat thereof containing polystyrene spacer beads and coated from an aqueous solution, with an overcoat containing spacer beads obtained with any of the other binders disclosed for overcoats disclosed in DeBoer '582 (e.g., col. 2, lines 50-53) with the reasonable expectation of obtaining a dye-ablative recording element that does not contain a separate receiving element and is used in a process of forming an ablation image. In other words, we find that the combined teachings of the DeBoer references would not have reasonably suggested to that person that dye-donor elements of assemblies other than that of DeBoer '572 Example 3, can be successfully used separately from the associated dye-receiving layer in a process of forming an ablation image. Even if there was such suggestion in the combined teachings of the DeBoer references, there is no further suggestion in these references to use the specific overcoat materials specified in appealed claim 7. Indeed, as appellants point out (reply brief, page 3), the cellulose derivatives relied on by the examiner (answer, page 4; supplemental answer, pages 3-4) are taught to be binders for the dye layer of the dye-donor element.

Furthermore, we cannot agree with the examiner's contention (answer, pages 4-5 and 8-9; supplemental answer, pages 1-3) that one of ordinary skill in this art would have found the suggestion in the combined teachings of the applied prior art to modify the overcoat layer of the dye-donor element of

DeBoer ‘572 Example 3 by using the PTFE beads of Vanier ‘860 in place of the polystyrene spacer beads. As appellants point out (principal brief, pages 5-6; reply brief, pages 1-2), Vanier ‘860 discloses the use of lubricating particles, *inter alia*, PTFE beads, in the slipping layer and in the dye layer, which layers are on opposite sides of a support, in preparing a dye-donor element which does not have an overcoat and is used with a dye-receiving layer in thermal dye transfer processes which employ a thermal printing head (e.g., cols. 1-2 and 5-8). We find that this reference teaches the use of the lubricating particles to overcome problems encountered with the storage of the dye-donor elements and the transfer of heat to the dye-donor element by the thermal printing head (*id*., e.g., cols. 1-2). The examiner has provided no evidence or scientific explanation why one of ordinary skill in this art would have recognized that PTFE beads, based on their lubricating properties as taught in Vanier ‘860, can be used in place of polystyrene beads, and indeed, in a different polymer binder, in the overcoat of the dye-donor used in DeBoer ‘572 with the reasonable expectation of obtaining a dye-ablative recording element that does not contain a separate receiving element and is used in a process of forming an ablation image with a laser. Indeed, the bare statement with respect to knowledge in the art on page 17 of appellants’ specification does not provide such a suggestion and expectation of success because the materials with respect to which the statement is made are not disclosed in the applied prior art. Because the examiner has not established a *prima facie* case of obviousness, we have not considered appellants’ contention that the evidence in the table on page 17 of the reference establishes unexpected results.

Thus, it is manifest that the only direction to appellants’ claimed invention as a whole on the record before us is supplied by appellants’ own specification. *Dow Chem*., 837 F.2d at 473, 5 USPQ2d at 1531-32.

The examiner's decision is reversed.

Reversed

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
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	)	
CHARLES F. WARREN	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
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ROMULO H. DELMENDO	)	
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